# Helping Children with Emotional Difficulties: A Response to Intervention Investigation

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This article describes a Response to Intervention (RTI) model of service delivery implemented within a rural elementary school for students in kindergarten through fifth grade experiencing significant emotional and behavioral difficulties. A multi-tiered model is presented that includes school wide interventions in Tier 1, as well as a six separate interventions applied within Tier 2 and Tier 3. These included applied behavioral analysis, social skills training, counseling, differentiated instruction, cognitive behavioral interventions and parent involvement designed to assist identified students with improving prosocial skills. Nine children were treated within this program model over a two year period, resulting in two students being placed in special education under the category of emotional disturbance by the project's termination. Positive and negative aspects of the project's implementation are reviewed, along with directions for future research.

The challenge of meeting the educational needs of children exhibiting severe emotional and behavioral problems has been well documented within the research literature (Gresham, 2005; Simpson, 2004; Harris-Murri, King, & Rostenberg, 2006). These issues appear particularly problematic within the rural educational setting (Murray, 2005). A Response to Intervention (RTI) model can provide a methodology to assist this population in being successful within the academic environment. While the majority of research to date has involved the application of RTI models to the treatment and identification of learning disabilities (Fletcher, Francis, Morris & Lyon, 2005; Kavale, Holdnack & Mostert, 2005; Marston, 2005), others have indicated the appropriateness of this process to the treatment of behavioral and emotional challenges many students face (Batsche, Elliot, Graden, Grimes, Kavaleski, Prasse, et al, 2005; Reschly, 2006; Gresham, 2005). This program evaluation describes the implementation of a RTI model, within the framework of positive behavioral supports, in helping children in kindergarten through fifth grade who experience challenging behavior that adversely affects their educational performance.

Several barriers to the provision of special education services within rural areas have been enumerated in the research literature including recruitment and retention of highly qualified teachers, meeting the demands of No Child Left Behind and the threat of litigation regarding service delivery methods. These barriers have issues in common. Kossar, Mitchem, and Ludlow (2005) reported rural schools face problems recruiting and retaining highly qualified

special education teachers due to low salaries, limited resources, geographic isolation and a paucity of funds and time for ongoing staff development. In addition, Miller, Brownell and Smith (1999) indicated there is some evidence that Special Education teachers who are inadequately prepared are more likely to leave teaching for alternative employment. This lack of highly qualified staff directly affects the rural school's ability to meet the demands of No Child Left Behind, including their accountability for student growth academically and behaviorally (Nagle, Hernandez, Embler, Mclaughlin & Doh, 2006). Hughes and Adera (2006) suggested these issues are exacerbated when considering service provision for students with emotional disabilities. In addition, researchers have identified factors that impact the threat of litigation regarding the delivery of special education services in rural areas (Scheffel, Rude, & Bole, 2005) and specifically to the provision of services for students experiencing emotional disabilities (Murray, 2005). These factors include staff expertise in dealing effectively with children with emotional disabilities and the ability to communicate compassionately and effectively with parents of children experiencing these challenges. Thornton, Hill & Usinger (2006) suggested rural schools struggle with a lack of integrated, systemic approaches when considering ways to improve the adequate yearly progress of students as mandated by No Child Left Behind. Rural schools tended to deal with isolated subgroups (e.g., special education or minority students not making adequate yearly progress in math) rather than tackling the more difficult system challenges that may result in school failure

(e.g., shortcomings of the core curricula or instructional practices of the general educator). Likewise, Murray (2005) identified the need to look outside traditional operations, programs and practices to successfully meet the needs of students with emotional disabilities, indicating a need for schools to address comprehensive changes at the systemic level to ensure educational progress for all students. RTI processes focusing on the needs of students with learning and emotional disabilities show promise in addressing many of these identified issues (Gresham, 2005; Batsche et al, 2005; Reschly, 2006).

RTI involves continuous performance monitoring for purposes of early identification and early intervention for students exhibiting problem behavior within their schools (Jimerson, Burns, and VanDerHeyden, 2007). Further, RTI involves the implementation of a multi-tiered model and mandates the use of research based interventions to assist students in being successful within their academic setting (Batsche, et al, 2006; Compton, Fuchs, Fuchs, & Bryant, 2006; Fuchs & Fuchs, 2006). In addition, Fuchs and Fuchs (2005) described two RTI models: (a) the problem solving model promulgated by practitioners and, (b) the standard protocol model advanced by researchers. The problem solving model follows an assessment, planning, implementation, evaluation and redesigning format. By its very nature, interventions may vary across students, classrooms and grades. Standard protocol models, on the other hand, embody the implementation of standard interventions for specified periods of time and designed for specific problems (e.g., reading or math disability). In both models, assessment of student progress drives movement from one tier of intervention to the next. Given the variable nature of social and emotional difficulties, staff expertise, classroom environments, social settings, and ease of implementation of individual strategies the problem solving model would appear to be the most applicable to the treatment of emotional disabilities (Fairbanks, Sugai, Guardino and Lathrop, 2007). This was the model utilized within this investigation.

# Methodology

# Purpose of the Study

The purpose of the study was to evaluate the implementation of an RTI model in the treatment and identification of students in kindergarten through fifth grade who experienced significant emotional and behavioral problems within a rural school setting. The program was implemented during two successive academic years (2004-2005; 2005-2006), within two elementary schools in a rural community in an upper plains state. One school served children from kindergarten through second grade, while the other school served children in grades three through five.

## Context

South Dakota, the state in which this study was conducted, ranks 16<sup>th</sup> in land area and 46<sup>th</sup> in population with only 781,919 citizens accounting for approximately 0.3% of the U.S. total (U.S. Census, 2006). The educational cooperative providing a variety of related services (e.g., speech and language, psychological, physical therapy, occupational therapy) to the thirteen schools within this region of South Dakota serves one of the least populated areas in the United States. The concept of rural may not provide an adequate description of this area. Perhaps the concepts of remote or frontier offer a truer picture of this geographical region. The Office of Rural Health Policy Resources and Services Administration within the Department of Health and Human Services (1998) designated areas with population density under twelve people per square mile as "frontier." Consider that approximately 60,000 people occupy this large landmass (approximately 11,250 square miles), resulting in a population density of just over 5 people per square mile. Issues pertaining to the provision of Special Education services within rural areas are certainly applicable to this frontier environment.

Approximately 350 students attended each of the two elementary schools involved in the program. There were five kindergarten teachers and corresponding classrooms, as well as six teachers in each of the other grades. There were 15-18 students placed in each classroom. Nine tenured teachers participated in the study having taught at least four years within the school district. Six of the teachers held bachelor's degrees in elementary education; two of the teachers had bachelor's degrees in elementary education and special education; while one held a master's degree in education. The teachers were identified for inclusion within the study based on having the children of concern placed within their classrooms.

# **Participants**

Nine students were involved in this program during the two years of its implementation. Table 1 provides descriptions of each student's problem behaviors, diagnoses before or during the program implementation (if available), grades in school during the project, measures of general intelligence, and prescribed medications taken during the course of the study. These students were identified as needing support due to significant emotional and behavioral problems manifested within the school setting. At the time of referral to the program, parents provided permission for their child's involvement in the supports and interventions noted below.

## Intervention Team

When implementing effective RTI models, a core team of educational professionals must take responsibility for program implementation and evaluation (Jimerson, Burns, and VanDerHeyden, 2007). Within the context of the RTI effort described here, this team consisted of the building level principal, classroom teacher of the student exhibiting challenging behavior, school counselor, school psychologist, special education teacher, teacher aides and parent(s) of the identified student. This team was responsible for determining (a) what students were referred into the second

tier of the RTI program, (b) what interventions were implemented and at what point in time, (c) evaluation of child progress to determine if additional interventions were necessary or if interventions could be faded out, (d) overall program evaluation to ensure the welfare of the identified student, as well as their peers, and (e) determination of when referral for special education evaluation occurred.

 Table 1

 Participant Profiles, including diagnosis and medication

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Student/Gender	<u>Grade</u>	Problem Behavior	<u>Diagnoses/Medication</u>
1/M	K: 1st	aggression, tantrums, non- compliance, low frustration tolerance, crying, perfectionism	Oppositional Defiant Disorder, depression, possible Reactive Attachment Disorder/Luvox
2/F	4th: 5th	aggressive, angry, depression, non-compliant, seizures, obsessive	Tuberous Sclerosis/ <i>Depakote</i> , <i>Luvox</i>
3/M	K: 1st	aggression, non-compliance, depression, crying	None/None
4/M	1st: 2nd	aggression, crying, non- compliance, low frustration tolerance, theft, running away from classroom	Bipolar Disorder; learning disability/ None
5/F	3rd: 4th	aggression, non-compliance, crying	depression/Zoloft
6/M	2nd: 3rd	ritualistic, aggressive, non- compliant, seizures	Asperger's Disorder, seizure disorder/ <i>Depakote</i> , <i>Risperdal</i>
7/M	3rd: 4th	depression, non-compliance, angry, impulsive, hyperactive	ADHD; learning disability/ Concerta
8/M	3rd: 4th	hyperactive, impulsive, aggressive, crying, theft	ADHD; depression/Adderral, Seroquel
9/M	3rd: 4th	moody, tearful, angry, non- compliant	Bipolar Disorder/ <i>Depakote</i> , <i>Seroquel</i>

Students 1, 3, 4, 5, 7, 8 & 9 had average intelligence; Students 2 & 6 had low average intelligence. Intelligence was measured by the *Wechsler Intelligence Scale for Children - Third Edition* or the *Wechsler Intelligence Scales for Children - Fourth Edition*.

# Tiers of Intervention within the RTI Model

Tier 1 Interventions. The RTI model implemented in this effort to assist students with emotional and behavioral challenges had three tiers of intervention. interventions involved classroom and building level approaches designed to promote positive behavior throughout the entire student population. Teachers within this program utilized Assertive Discipline as described by Canter and Canter (1992). This program assisted the teacher in identifying classroom rules (i.e., 4-6) that were designed to guide expectations for classroom behavior. In addition, a hierarchy of negative consequences (i.e., 3-5) were identified and applied at the occurrence of maladaptive behavior from the students. Many teachers utilized a "name on the board" system with color coded markers that identified increasing levels of behavioral inappropriateness. Finally, a system of rewards (e.g., class parties, weekly free time) for appropriate behavior was implemented within the classrooms to encourage prosocial behavior. In addition, the school also implemented Character Counts (2001), a program that emphasizes the development of six character traits including trustworthiness, respect, responsibility, fairness, caring and citizenship. Children were identified by teacher nomination as "model citizens" for exhibiting the traits noted above and received public praise and feedback regarding their accomplishments. Finally, interventions included individual disciplinary processes implemented by the building level principals. included talking to the child regarding their misbehavior, contacting parents, and the removal of privileges (e.g., recess).

Tier 2 Interventions. Tier 2 interventions within this model involved the application of one or more of the interventions noted below. The application of these interventions was determined as a result of hypotheses generated from functional behavioral assessments (Gresham, Watson, & Skinner, 2001; Ervin, Ehrhardt, & Poling, 2001). Following these assessments, the intervention team met and brainstormed possible strategies that would assist the student in being successful based upon identified problem behavior and potential behavioral deficits. These interventions included strategies from applied behavioral analysis, cognitive behavioral interventions, social skills training, counseling, differentiated instructional practices and parent involvement. In addition, a method of application and withdrawal of these interventions followed a format outlined by Barnett, Daly, Jones and Lentz (2004). An intervention was implemented and student adjustment continued to be monitored. If the student's behavior did not improve to the point of acceptance by the intervention team, additional interventions were initiated. Once behavioral control was established, interventions were faded.

*Tier 3 Interventions*. Tier 3 interventions in this model included support made available as a result of being placed within the Special Education program (which included the

continuation of interventions utilized within Tier 2), supports from mental health systems outside the school and/or placement in alternative educational settings (Lane, Wehby, Robertson and Rogers, 2007).

#### Interventions Utilized Within the RTI Model

The interventions utilized within Tier 2 and Tier 3 of this study are described below. Many of these interventions were consistent with the Individuals with Disability Education Act of 2004 regarding the use of functional behavior assessments, positive behavior supports and the development of behavior intervention plans for students whose behavioral or emotional status was compromising their ability to benefit from their educational program (IDEA, 2004). These interventions have been shown to be effective in supporting behavior change for at-risk students.

Applied Behavior Analysis. Interventions within this domain included applications of reinforcement programs to increase behaviors (i.e., including the use of token economies and differential reinforcement procedures); use of time out or work away programs to interrupt and redirect maladaptive behavior; and the application of antecedent control strategies to set the stage for certain behaviors to occur (Alberto & Troutman, 2006). Reinforcement programs designed to promote positive behavior were developed to provide high rate (i.e., continuous) feedback/reward initially, while this feedback was then faded to fixed interval schedules of reinforcement. Fixed interval schedules appeared to be easier for staff to manage (i.e., as opposed to fixed ratio schedules). Work away programs were designed to provide a quiet setting for children to access in order to regain behavioral or emotional control when their behavior became disruptive. At times, this area was within the classroom, while areas within the special education resource room were also designated for this purpose. The time intervals for these procedures ranged from 10-30 minutes. Environmental restructuring programs, as part of antecedent control strategies, were implemented to redesign environments so children were less likely to engage in negative behavior and more likely to engage in pro-social behavior. These approaches involved changing of (a) physical aspects of the classroom (e.g., position of whiteboard relative to targeted child; location of learning centers or individual work centers); (b) seating of various students near (or away from) each other; and (c) increased supervision by staff during unstructured times (e.g., lunch, recess). The application of aversive stimuli or negative sanctions (apart from brief time out/work away intervals) was not utilized within this model. Much of the current research in this area can be found in the Positive Behavior Supports and functional behavioral analyses literature ( Kern, Hilt, & Gresham, 2004; Strichter, Hudson, & Sasso, 2005; Gresham, Watson & Skinner, 2001; Sterling-Turner, Robinson & Wilczynski, 2001; Burnhill, 2005; Killu,

Weber, Derby & Baretto, 2006; Stormont, Lewis, & Smith, 2005).

Social Skills Training. This intervention method was utilized based on the assumption that many of the students' emotional and behavioral difficulties emanated from their inability to successfully negotiate social situations. These skill deficits were identified via functional behavioral assessment (FBA) completed by the intervention staff. The social skill training sequences were implemented by school counselors and the intervention team members (e.g., special education teachers) following training by the school psychologist. Social skill training programs followed processes outlined in McGinnis and Goldstein (1997) and Gresham, Van, and Cook (2006). While the training sequences resembled those outlined in these sources (i.e., including coaching, introduction of the skill, modeling, role playing and rehearsal, feedback and ongoing assessment of skill utilization), the amount of time involved in training did not match the time outlined in Gresham, Van, and Cook (2006). The students were engaged in initial training sequences where they practiced specific skills (e.g., asking for help, disengaging in conflict with peers, being assertive rather than aggressive, asking permission and managing angry feelings). Students were involved in 5-10 initial training sessions that lasted for approximately 30 minutes per session. This training occurred within a resource room outside of the regular classroom setting. Additional social skill training sessions were implemented as the need was identified, after significant behavioral events or when identified by intervention staff during weekly staff meetings. Use of these strategies was prompted by intervention team members within the general milieu following initial training through such questions as, "Do you remember what you need to do if you need to ask for help?" Continuous feedback was provided by intervention team members to the students concerning their progress with use of these procedures.

Cognitive Behavioral Interventions. These interventions included problem solving processes (both written and verbal), self monitoring programs, practicing of skills, self directed speech and feedback from peers and staff regarding use of self control strategies. The strategies outlined in Bloomquist (1996), Braswell and Bloomquist (1991) and Dobson (2001) provided the technical support and guidance for these interventions. These strategies were initially introduced to the students following identification of these processes as applicable to a particular child following FBA. The training sessions occurred daily until the student demonstrated mastery. This training occurred within a resource room setting outside of the regular classroom. Use of these strategies was again prompted by the intervention team members within the general milieu following initial training. Continuous feedback was provided by team members to students regarding progress in the use of these procedures.

Differentiated Instructional Approaches. Researchers have documented that academic challenges can create or set the stage for manifestation of student behavior problems (Roberts, Marshall, Nelson & Albers, 2001; Treptow, Burns & Comas, 2007). This is exacerbated by many students with emotional and behavioral difficulties having co-existing learning disabilities. As such, it is extremely important to ensure that academic material is presented at a level and in such a manner that learning will occur as easily as possible for this group of students. As Hughes and Adera (2006) indicated, one of the best deterrents for inappropriate behavior within a classroom setting is meaningful and relevant academic instruction with materials that are aligned to the student's instructional level and are emotionally and intellectually engaging. The use of differentiated instruction provides the basis for this portion of the treatment model. Information contained in Tomlinson (1999) and Tomlinson and McTighe (2006) provided the structure for these processes. The majority (6 of 9) of the students involved in this program experienced academic failure. They were unable to successfully complete work at their respective grade level. As such, presenting academic material in a way and at a level to ensure success at least 80% of the time became the goal of this intervention. This involved differentiating content, process and products (Tomlinson, 1999) to ensure the success rate noted above. Content was frequently altered to allow the student to engage in the topic, but at a level they could comprehend. If the class was working on double digit addition and the student had not yet mastered single digit addition, his work would reflect that. Differentiating process focused on the use of manipulatives, activity-based instruction, visual representation of material, and inquiry based approaches which appeared to be more engaging to this population. Differentiated products resulted from these changes in process.

Individual and Group Counseling. The role of the school counselor in this model was central to several functions. First, the counselor was a safe haven for the student exhibiting emotional and behavioral challenges. Weekly (and crisis intervention) sessions were held to provide the student with an opportunity to talk with a supportive adult and assist the child in understanding the social and academic ramifications of their behavior. This provided the counselor an opportunity to continually monitor the student's adjustment and emotional status, insight into their difficulties, and an opportunity to practice the social and problem solving skill sequences introduced previously. Information obtained from these sessions provided the intervention team with feedback regarding the need for additional social skill training sessions or additional sessions in acquiring cognitive behavioral strategies. In grades 3-5, group sessions allowed the students additional opportunities to practice their social skills and cognitive behavioral strategies, as well as talk about their adjustment. In addition, the school counselor developed liaisons with other mental health providers working with the children and their families. This allowed information to flow freely from the school to community providers.

Parental Involvement. The primary focus of this portion of the treatment model was on improving communication between the school and the child's parent or guardians. As reported by Marzano (2003), the number one intervention identified as important to parents was their timely notification of child misbehavior. In addition, Gargiulo (2007) has indicated the process of acceptance of a disability by parents and other family members can be an arduous and lengthy ordeal. Involving parents in a continuous communication process regarding their child's adjustment assisted with this and helped to ensure a cooperative partner in the intervention procedures. In addition, ensuring parents that they are being heard by school personnel and are an integral part of the intervention team decreased the likelihood of litigation (Scheffel, Rude and Bole, 2005). This was accomplished via daily reports home in a progress notebook, which gave parents timely feedback and allowed them to share adjustment issues at home. Within the RTI model described here, most parents did not have to provide contingencies at home for behaviors occurring at school. There were significant concerns about fidelity with this practice. The intervention staff did, however, assist parents in learning skills to review daily progress in school within the problem solving spirit of the interventions used within this model. The focus on discussing problems at home was to (a) demonstrate to the child that school and home were working together and (b) raise awareness of the challenges the child was experiencing at school in order to find solutions, not to punish. These topics were reviewed with parents at the program's inception, as well as informally when issues arose throughout the course of the intervention program.

School members of the intervention team met weekly in one hour staff meetings in order to review child progress, reflect on issues and challenges, and develop additional strategies to be used to assist the students. Parents were often included in these meetings either at the request of the school team members or by self referral.

## Data Collection

An integral part of RTI is the use of curriculum based measures for ongoing assessment of student performance within the core curriculum (Batsche et al, 2005; Fuchs and Fuchs, 2005). While a large body of research exists in the areas of reading, Reschly (2006) noted a paucity of research in the areas of social and emotional adjustment. Researchers (Fuchs and Fuchs, 2006; Lane, Wehby, Robertson, and Rogers, 2007) have identified the use of behavior rating forms, office referrals and attendance data for these purposes. The students involved in this study were identified via office referrals. Students were referred to the principal's office for disciplinary reasons after not responding to Tier 1 intervention efforts by the classroom

teacher. Interviews of the general and special education teachers indicated that students referred to Tier 2 interventions exhibited behaviors that endangered themselves or others; disruptive behaviors that could not be redirected; or behaviors that disrupted or interfered with the learning of other students. Principals referred these children into Tier 2 of the RTI process when they did not respond to the Tier 1 interventions, after 4 or more referrals to the principal for maladaptive or disruptive behavior. The decision to refer to Tier 2 was jointly determined by the principal and classroom teachers. Behaviors which resulted in these office referrals became the targets of intervention and monitoring throughout the RTI process. Once Tier 2 of the RTI processes was implemented, intervention staff collected data daily regarding students' identified maladaptive behaviors.

## **Results**

# Fidelity of Interventions

Fidelity of Tier 1 interventions was assessed through discussions with the building principal and teachers. The results indicated variable implementation across classrooms. There appeared to be differences in classroom rules, training of the students on classroom expectations, implementation of rules and feedback to students. Fidelity of Tier 2 and Tier 3 interventions were assessed weekly and discussed at the intervention team meetings. A problem solving approach to improving implementation of school based intervention procedures was completed throughout the study and resulted in overall intervention compliance exceeding 85%. The intervention with the lowest compliance rate (50-85%) was applied behavior analysis within the individual classrooms. The fidelity of the parent participation intervention was evaluated by parent self report only. Parent participation varied across the nine students, as well as across the two year interval.

## Quantitative Outcomes

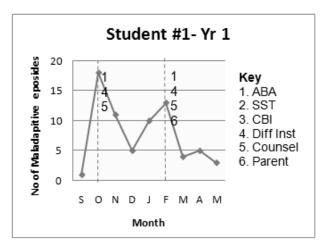
The nine graphs of the individual students provide a visual display of their progress throughout the course of the RTI implementation. Seven of the nine students' behavior improved substantially as a result of the interventions, while the behaviors of two of the students were not significantly improved during the course of the RTI implementation. These students were subsequently referred to and placed in special education on the basis of emotional disturbance due to the severity of their behavior.

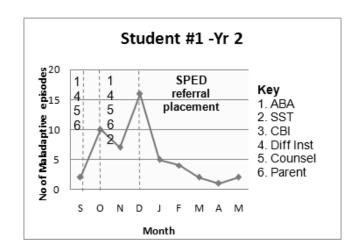
Figure 1 provides the graphs for students 1 and 2. As can be noted, behavioral control for student 1 was obtained toward to the latter half of the first year, while his behavior accelerated during the first half of the second year. Despite the implementation of five of the six possible interventions, his behavior was viewed as unacceptable for the general

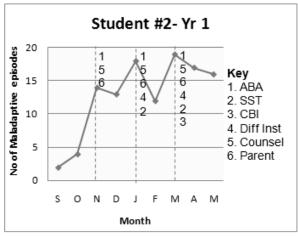
classroom during December of the second year. It is significant to note the intervention team referred the student for special education services due to the student's aggression toward peers. Apart from this aggressive behavior, the student's progress was considered good. Student 2's behavior was not substantively improved over the two years despite the implementation of all the interventions. Referral to special education was once again the result of aggressive behavior toward both peers and staff members.

Five of the students responded favorably to the interventions within the RTI model, even though none of the interventions were able to be faded during the course of the program implementation as described in Barnett, Daly, Jones and Lentz (2004). Their progress is displayed in Figures 2 and 3.

The other two students also responded favorably to the interventions within the RTI model. In addition, these two students were able to maintain positive behavioral adjustment following fading of interventions (Figure 4).







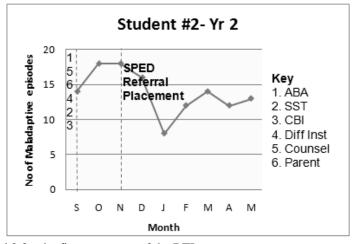
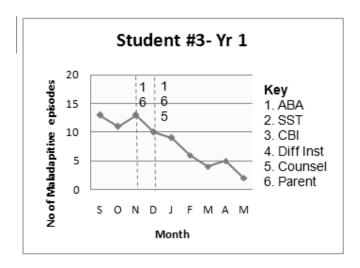
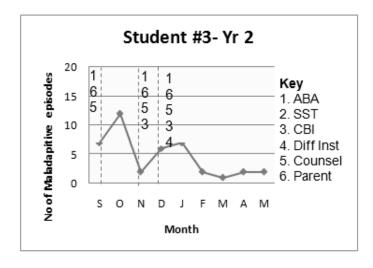
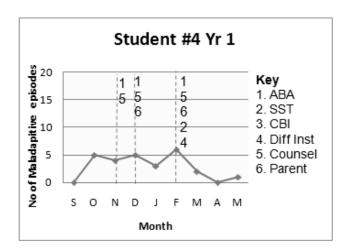
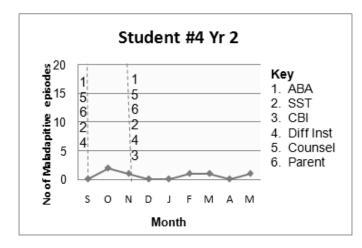


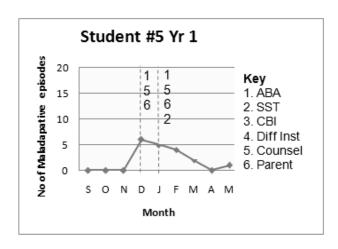
Figure 1. Progress graphs for students 1 and 2 for the first two years of the RTI program.

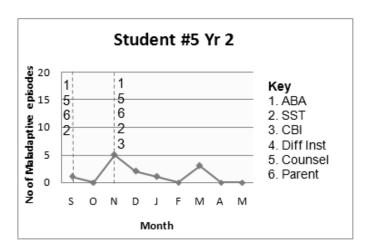




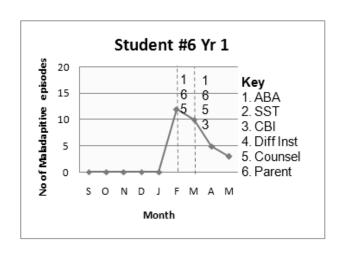


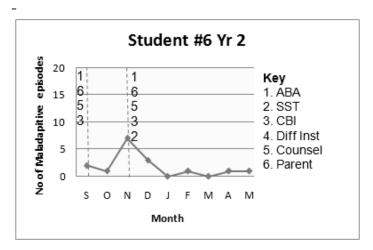


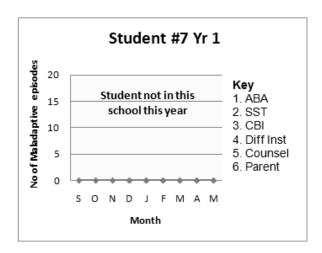


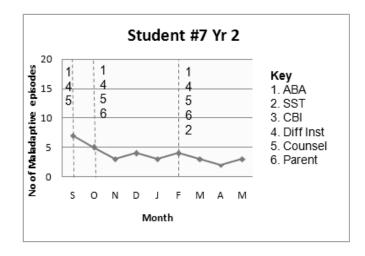


**Figure 2.** Progress graphs for students 3, 4 and 5 for the first two years of the RTI program.









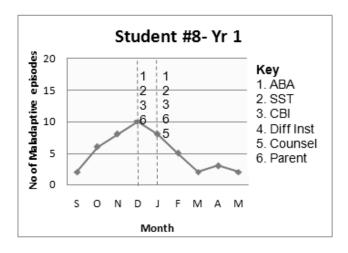
**Figure 3.** Progress graphs for students 6 and 7 for the first two years of the RTI program.

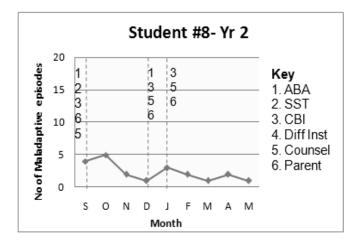
In reviewing the figures, several questions arise concerning timing and implementation of the interventions across the nine subjects. First, the decision regarding when to initiate particular interventions for specific students was determined by the intervention team (including the parents). Several factors were considered by the intervention team including ease of implementation, the developmental level of the student, the presenting problem, and the results of FBA. Second, the general problem solving method utilized within the RTI model suggested additional interventions should not be implemented if the student's behavior was improving. Likewise, interventions were generally added when maladaptive behavior was accelerating relative to the level from the previous month. As can be noted, ABA, counseling and parent involvement were generally introduced first. It was felt by the intervention team that these strategies were the easiest to implement and resulted in the least time out of the general education setting. Most teachers felt they could easily implement reward systems for

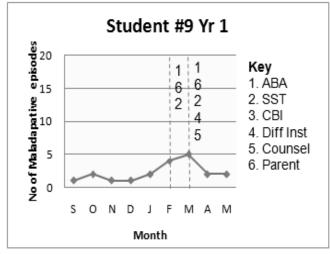
prosocial behavior. Despite this belief, information gained on fidelity of implementation suggested otherwise. Classroom teachers frequently reported challenges with following through with reward systems and antecedent condition strategies. Counseling and parent involvement were two other strategies which were implemented with relative ease. The developmental level of the student also impacted implementation. The intervention team felt kindergarten and first grade students were the least likely to benefit from cognitive behavioral interventions and social skills training due to the heavy emphasis on meta-cognition with these procedures (Dobson, 2001). Third, the use of FBA throughout the process guided the intervention team in implementing various strategies. In the event the FBA suggested behavioral problems may be the result of social skill deficits, that training would be initiated. In the case of student 1 the intervention team felt he may benefit from learning the social skill of "asking for help when frustrated." As such, that intervention was initiated during the second

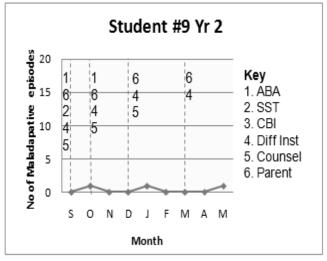
year. If the FBA suggested potential problems with irrational thinking, self management, self control, self evaluation or self reward, cognitive behavioral interventions were initiated. Finally, the intensity and nature of the problem behavior was paramount in guiding the intervention team in adding or changing interventions, despite what the

frequency of the data demonstrated. When interventions were implemented that did not meet the general problem solving criteria or method, it was due to the intensity and duration of aggressive and noncompliant behavior being exhibited by the student.









**Figure 4.** Progress graphs for students 8 and 9 for the first two years of the RTI program.

## Qualitative Outcomes

In addition to the quantitative data noted above, qualitative data also suggested positive outcomes attributed to this RTI model. Interviews were completed with the general education teachers, special education teachers, principals, students and parents involved in this program. Seven of the nine general educators were supportive of the program and reported "I have really appreciated the support from the (intervention) staff;" "It is nice to have some help with our really challenging students;" "they (students) are

learning skills to deal with their problems;" "It is nice to know we have a plan if the student becomes disruptive in my class;" "I liked the weekly meetings;" and "I have learned a lot about what these kids need to be successful." Two of the general educators, however, did not provide such positive feedback: "(the students) are just getting away with it when they get to go to the resource room!" (i.e., for problem solving with staff); "they are not getting any better, they are still acting out;" "What will they (Students) do when they don't have all of this help?"; "It isn't fair to the

other students;" and "they (the students) need to learn to behave like other students!"

The Special Education staff responded very favorably to the program implementation noting, "I really like being able to help them learn how to manage their emotions"; "It is fun to see them improve"; "I liked being able to learn how to talk with them about their problems, figuring out solutions!"; "It was a lot of help to recognize (good) behavior needs to occur before learning"; "It was nice to have a plan for these kids, rather than just getting them dumped in here" (i.e., in the resource room); "I really liked teaching the social skills and problem solving part"; and "This really helped us show parents how their kids were doing".

The principals also made supportive comments including "This provided us with a way to systematically address student issues" and "I appreciated the help with our most challenging students." There were times, however, when the principals felt the program goals were not necessarily in line with school policy. This was particularly evident with regard to aggressive behavior. While policy dictated a negative sanction like suspension, program efforts were grounded in problem solving methodology. In addition, the principal supervising the general education staff that had negative feelings about the program felt caught in a dilemma. As Murray (2005) noted, the ethical goals of the teacher (what is best for the student?) are occasionally not in concert with the ethical goals of the principal (what is best for the school?).

The parents provided powerful feedback regarding their feelings about the program including "It is nice to finally feel like someone is concerned about my son"; "I really liked how you are trying to teach him how to behave"; "He is learning how to talk about his feelings"; "Before (this school and program) I usually felt blamed for my son's bad behavior, you guys are trying to help!"; "I liked the daily notebook to let me know how his day went"; and "This has really helped my daughter." Only one parent was negative noting "You are letting him get away with murder!" Finally, students also reported positive feelings about the program stating, "I like to come here (resource room) to get help with my anger"; "I know what the rules are here (resource room)"; "I don't feel so sad all the time"; "My Mom thinks I am doing better in school than before"; "I haven't gotten into trouble at recess for a long time!"; and "I don't hate school so much now."

## **Conclusions and Recommendations**

The results of the two year RTI program implementation suggested an overall positive effect in improving student behavior, as well as being accepted by education staff, families and the children themselves. This RTI implementation addressed the shortcomings of previous models as outlined by Reschly and Ysseldyke (2002) and Fletcher, Coulter, Reschly and Vaughn (2004) including

having assessment relate to interventions, prioritizing interventions and outcomes over eligibility, and eliminating the wait to fail phenomenon present in current practices. In addition, the results addressed issues identified as salient in the provision of special education services within the rural area including training and retention of teachers, financial issues of meeting the mandates of IDEA 2004, and threats of litigation by disheartened parents. The positive involvement and statements made by parents suggested this model has merit in terms of engaging them in their children's educational programs, having them feel the school is committed to their child's success and improving communication with educational staff. As Murray (2005) indicated, these dynamics have significant effects in terms of decreasing the likelihood of litigation. The positive responses noted by most teachers involved in the program suggested they felt successful with a very challenging student group. As noted in Miller, Brownell and Smith (1999) this empowerment assisted in teacher retention over The teacher responses and program outcomes time. indicated the weekly staff meetings were essential in maintaining staff motivation as well as providing necessary technical support and staff training in order to ensure program integrity. Previous researchers (Hughes and Adera, 2006) have documented the importance of these activities in retaining quality teachers. Finally, results of the study suggested this model could be implemented by the general education teacher, special education teacher, teacher's aides, and the school counselor with consultative support and training from a school psychologist familiar with the interventions. Given the financial challenges faced by most rural schools, programs which can be implemented with a minimum number of staff would appear to be quite beneficial.

The school counselor in this model fulfilled a central role in working with the at risk students and their families, providing critical information to the program staff regarding the student's perceptions and communicating effectively with community mental health providers. It is significant to note, not all school counselors readily accept or embrace this special education support role (Montiero-Leitner, Asner-Self, Milde, Leitner and Skelton, 2006). As such, it is imperative to assess the school counselor's commitment prior to program implementation.

There were some developmental differences noted in terms of the student's responses to intervention within the program. Students at the Kindergarten and First grade levels appeared to benefit the least from social skills training or cognitive behavioral interventions. Given their level of cognitive development this seems logical. It did, however, introduce them to the idea of seeking help when facing challenges within the school and to the language of self-control. Applied behavior analysis interventions and parental involvement appeared to have the most impact at this level. Students in grades 3-5 enjoyed the social skills and cognitive behavior intervention training sequences, as

well as the subsequent problem solving sessions. On occasion, intervention staff had to deal with students avoiding other school work to "problem solve" a reported dilemma. This was generally dealt with via verbal redirection.

The behaviors identified, treated and monitored within this RTI model were determined as a result of office referrals. While frequency of behaviors were the primary factors in assessing student growth, it is also important to recognize the social or ecological validity of the behaviors in questions (Gresham, 2005). The primary behavioral concerns of the two students who were subsequently placed in special education on the basis of emotional disturbance during this RTI model implementation were aggression toward staff and other students. The social or ecological impact of these behaviors was more salient than the frequency of the behaviors in question. While subsequent RTI attempts will probably continue to focus on frequency of maladaptive behaviors to document progress monitoring, it would appear that emphasis on the social validity and ecological impact of these behaviors will also need to be considered.

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